

## Amendments to the Claims

1.-14. (Canceled)

15. (Original) A mixture of primers for performing multiplex polymerase chain reaction, wherein the primers are present in the mixture at a predetermined ratio to each other, wherein the ratio of the concentrations of the primers is described by:

$$C_A = C_L (L_A \div L_L)^2$$

Wherein  $C_A$  is the concentration of primers for an amplicon A; wherein  $C_L$  is the concentration of primer for the longest amplicon; wherein  $L_A$  is the length of the amplicon A; and wherein  $L_L$  is the length of the longest amplicon.

16. (Original) The mixture of claim 15 which comprises at least 4 primers.

17. (Original) The mixture of claim 15 which comprises at least 6 primers

18. (Original) The mixture of claim 15 which comprises at least 8 primers.

19. (Original) The mixture of claim 15 which comprises at least 10 primers.

20. (Original) The mixture of claim 15 which comprises at least 12 primers.

21. (Original) The mixture of claim 15 which comprises at least 14 primers.

22. (Original) The mixture of claim 15 which comprises at least 16 primers.

23. (Original) The mixture of claim 15 which comprises at least 18 primers.

24. (Original) The mixture of claim 15 which comprises at least 20 primers.